

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Samuel J. DANISHEFSKY, Peter BERTINATO, Dai-Shi SU, Dang Fang MENG, Ting-Chao CHOU, Ted KAMENECKA, Erik J. SORENSEN and Aaron BALOG

Serial or Patent No: 08/986,025

Filed: December 3, 1997

For: SYNTHESIS OF EPOTHILONES, INTERMEDIATES THERETO, ANALOGUES AND USES THEREOF

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**DECLARATION CLAIMING SMALL ENTITY STATUS --  
NONPROFIT ORGANIZATION**

I hereby declare that I am an official empowered to act on behalf of the nonprofit organization identified below:

NAME OF ORGANIZATION: Sloan-Kettering Institute for Cancer Research

ADDRESS OF ORGANIZATION: 1275 York Avenue, New York, New York 10028

TYPE OF ORGANIZATION

- ☐ University or other institution of higher education
- ☒ Tax exempt under Internal Revenue Service Code (26 U.S.C. §501(a) and 501(c)(3))
- ☐ Nonprofit scientific or educational organization under statute of state of the United States of America  
(name of state: )  
citation of statute: )
- ☐ Would qualify as tax exempt under Internal Revenue Service Code (26 U.S.C. §501(a) and 501(c)(3)) if located in the United States of America
- ☐ Would qualify as nonprofit scientific or educational under statute of state of the United States of America if located in the United States of America  
(name of state: )  
(citation of statute: )

I hereby declare that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 C.F.R. §1.9(e) for purposes of paying reduced fees under Section 41(a) or (b) of Title 35, United States Code with regard to the invention entitled

SYNTHESIS OF EPOTHILONES, INTERMEDIATES THERETO, ANALOGUES AND USES THEREOF

by inventor(s) Samuel J. DANISHEFSKY, Peter BERTINATO, Dai-Shi SU, Dang Fang MENG, Ting-Chao CHOU, Ted KAMENECKA, Erik J. SORENSEN and Aaron BALOG described in

☐ the specification filed herewith

☒ application Serial No. 08/986,025 , filed December 3, 1997

☐ Patent No. , issued

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit organization with regard to the above-identified invention.

If the rights held by the nonprofit organization are not exclusive, each individual, concern or organization having rights to the invention is listed below\* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 C.F.R. §1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 C.F.R. §1.9(d) or a nonprofit organization under 37 C.F.R. §1.9(e).

\*NOTE: Separate declarations are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 C.F.R. §1.27)

FULL NAME:

ADDRESS:


☐ INDIVIDUAL    ☐ SMALL BUSINESS CONCERN    ☐ NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate (37 C.F.R. §1.28(b)).

Name of Person Signing: James S. Quirk

Title in Organization: Senior Vice President – Research Resources Management

Address of Person Signing: 1275 York Avenue, New York, New York 10028

Signature:  Date: 1/20/98

NONPROFIT ORGANIZATION

REV. 1/98

**DECLARATION  
AND POWER OF ATTORNEY  
Original Application**

As a below named inventor, I declare that the information given herein is true, that I believe that I am the original, first and sole inventor if only one name is listed at 1 below, or a joint inventor if plural inventors are named below, of the invention entitled:

**SYNTHESIS OF EPOTHILONES INTERMEDIATES THERETO,  
ANALOGUES AND USES THEREOF**

which is described and claimed in:

☐ the attached specification or

☒ the specification in application  
Serial No.8/986,025 filed  
December 3, 1997  
(for declaration not accompanying appl.)

that I do not know and do not believe that the same was ever known or used in the United States of America before my or our invention thereof or patented or described in any printed publication in any country before my or our invention thereof, or more than one year prior to this application, or in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application, that I acknowledge my duty to disclose information of which I am aware which is material to patentability in accordance with 37 CFR §1.56. I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I hereby claim the priority benefits under 35 U.S.C. §119 of any application(s) for patent or inventor's certificate listed below. All foreign applications for patent or inventor's certificate on this invention filed by me or my legal representatives or assigns prior to the application(s) of which priority is claimed are also identified below.

PRIOR APPLICATION(S), IF ANY, OF WHICH PRIORITY IS CLAIMED

<u>COUNTRY</u>	<u>APPLICATION NO.</u>	<u>DATE OF FILING</u>
U.S.	60/032,282	Dec. 3, 1996
U.S.	60/033,767	Jan. 14, 1997
U.S.	60/047,566	May 22, 1997
U.S.	60/047,941	May 29, 1997
U.S.	60/055,533	Aug. 13, 1997

ALL FOREIGN APPLICATIONS, IF ANY, FILED PRIOR  
TO THE APPLICATION(S) OF WHICH PRIORITY IS CLAIMED

<u>COUNTRY</u>	<u>APPLICATION NO.</u>	<u>DATE OF FILING</u>
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**POWER OF ATTORNEY:**

As a named inventor, I hereby appoint the following attorney(s) and/or agents(s) to prosecute this application and transact all business in the Patent and Trademark office connected therewith: Gordon D. Coplein #19,186, William F. Dudine, Jr. #20,588, Michael J. Sweedler #19,937, S. Peter Ludwig #25,351, Paul Fields #20,298, Harold E. Wurst #22,183, Joseph B. Lerch #26,936, Melvin C. Garner #26,272, Ethan Horwitz #27,646, Beverly B. Goodwin #28,417, Adda C. Gogoris #29,714, Martin E. Goldstein #20,889, Bert J. Lewen #19,407, Henry Sternberg #22,408, Robert A. Green #28,301, Peter C. Schechter #31,882, Robert Schaffer #31,194, David R. Francescani #25,153, Robert C. Sullivan, Jr. #30,499, Ira J. Levy #35,587, Joseph R. Robinson #33,448, A. David Joran #37,858.

all of the firm of DARBY & DARBY P.C., 805 Third Avenue, New York, NY 10022

SEND CORRESPONDENCE TO:

DARBY & DARBY P.C.  
805 Third Avenue  
New York, NY 10022

DIRECT TELEPHONE CALLS TO:

A. David Joran, Esq.  
  
212-527-7761

FULL NAME AND RESIDENCE OF INVENTOR 1

LAST NAME: DANISHEFSKY      FIRST NAME: Samuel      MIDDLE NAME: J.

CITY: Englewood

STATE OR FOREIGN COUNTRY: New Jersey

COUNTRY OF CITIZENSHIP: U.S.A.

POST OFFICE ADDRESS: c/o Office of Industrial Affairs,  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

CITY: New York

STATE OR COUNTRY: New York      ZIP CODE: 10021

FULL NAME AND RESIDENCE OF INVENTOR 2

LAST NAME: BERTINATO      FIRST NAME: Peter      MIDDLE NAME:  
CITY: Old Lyme      STATE OR FOREIGN COUNTRY: Connecticut      COUNTRY OF CITIZENSHIP: U.S.A.  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs,      CITY: New York      STATE OR COUNTRY: New York      ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

FULL NAME AND RESIDENCE OF INVENTOR 3

LAST NAME: SU      FIRST NAME: Dai-Shi      MIDDLE NAME:  
CITY: New York      STATE OR FOREIGN COUNTRY: New York      COUNTRY OF CITIZENSHIP: China  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs,      CITY: New York      STATE OR COUNTRY: New York      ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

FULL NAME AND RESIDENCE OF INVENTOR 4

LAST NAME: MENG      FIRST NAME: Qiang Fang      MIDDLE NAME:  
CITY: New York      STATE OR FOREIGN COUNTRY: New York      COUNTRY OF CITIZENSHIP: China  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs,      CITY: New York      STATE OR COUNTRY: New York      ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

FULL NAME AND RESIDENCE OF INVENTOR 5

LAST NAME: CHOU      FIRST NAME: Ting-Chao      MIDDLE NAME:  
CITY: Paramus      STATE OR FOREIGN COUNTRY: New Jersey      COUNTRY OF CITIZENSHIP: U.S.A.  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs,      CITY: New York      STATE OR COUNTRY: New York      ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

FULL NAME AND RESIDENCE OF INVENTOR 6

LAST NAME: KAMENECKA      FIRST NAME: Ted      MIDDLE NAME:  
CITY: New York      STATE OR FOREIGN COUNTRY: New York      COUNTRY OF CITIZENSHIP: USA  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs,      CITY: New York      STATE OR COUNTRY: New York      ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

FULL NAME AND RESIDENCE OF INVENTOR 7

LAST NAME: SORENSEN      FIRST NAME: Erik      MIDDLE NAME: J  
CITY: San Diego      STATE OR FOREIGN COUNTRY: California      COUNTRY OF CITIZENSHIP: U.S.A.  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs,      CITY: New York      STATE OR COUNTRY: New York      ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

FULL NAME AND RESIDENCE OF INVENTOR 8

LAST NAME: BALOG

FIRST NAME: Aaron

MIDDLE NAME:

CITY: New York

STATE OR FOREIGN COUNTRY: New York

COUNTRY OF CITIZENSHIP: U.S.A.

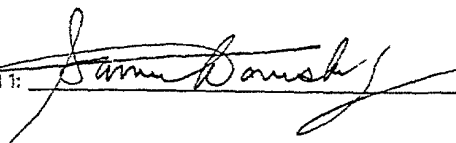
POST OFFICE ADDRESS: c/o Office of Industrial Affairs,  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

CITY: New York

STATE OR COUNTRY: New York ZIP CODE: 10021

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

SIGNATURE OF INVENTOR 1:



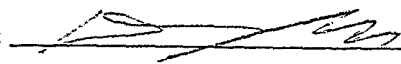
DATED:

12/30/97

SIGNATURE OF INVENTOR 2:

DATED:

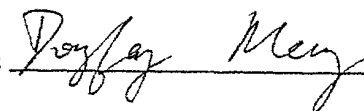
SIGNATURE OF INVENTOR 3:



DATED:

12/22/97

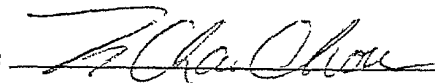
SIGNATURE OF INVENTOR 4:



DATED:

12/22/97

SIGNATURE OF INVENTOR 5:



DATED:

1/13/98

SIGNATURE OF INVENTOR 6:



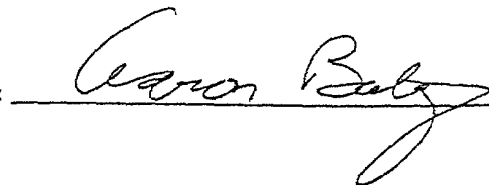
DATED:

12/22/97

SIGNATURE OF INVENTOR 7:

DATED:

SIGNATURE OF INVENTOR 8:



DATED:

12/30/97

M:107811C5981E0060

[illegible]

MIDDLE NAME:

COUNTRY OF CITIZENSHIP: U.S.A.

STATE OR COUNTRY: New York ZIP CODE: 10021

SIGNATURE OF INVENTOR 1: \_\_\_\_\_ DATED: \_\_\_\_\_

SIGNATURE OF INVENTOR 2: \_\_\_\_\_ DATED: \_\_\_\_\_

SIGNATURE OF INVENTOR 3: \_\_\_\_\_ DATED: 12/22/97

SIGNATURE OF INVENTOR 4: [Signature] DATED: 12/1/11

SIGNATURE OF INVENTOR 5: \_\_\_\_\_ DATED: \_\_\_\_\_

SIGNATURE OF INVENTOR 6: Ed Kamenick DATED: 12/22/97

SIGNATURE OF INVENTOR 7: ruk V. Gorenson DATED: 1/11/10

SIGNATURE OF INVENTOR 8: *Edwin J. DeLo* DATED: *12/30/47*

FULL NAME AND RESIDENCE OF INVENTOR 3

LAST NAME: BALOG

FIRST NAME: Aaron

MIDDLE NAME:

CITY: New York

STATE OR FOREIGN COUNTRY: New York

COUNTRY OF CITIZENSHIP: U.S.A.

POST OFFICE ADDRESS: c/o Office of Industrial Affairs,  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

CITY: New York

STATE OR COUNTRY: New York

ZIP CODE: 10021

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SIGNATURE OF INVENTOR 1: \_\_\_\_\_

DATED: \_\_\_\_\_

SIGNATURE OF INVENTOR 2: Peter B. Kunkle

DATED: 1/2/98

SIGNATURE OF INVENTOR 3: [Signature]

DATED: 12/22/97

SIGNATURE OF INVENTOR 4: Douglas Mery

DATED: 12/22/97

SIGNATURE OF INVENTOR 5: \_\_\_\_\_

DATED: \_\_\_\_\_

SIGNATURE OF INVENTOR 6: Eil Kamenick

DATED: 12/22/97

SIGNATURE OF INVENTOR 7: \_\_\_\_\_

DATED: \_\_\_\_\_

SIGNATURE OF INVENTOR 8: Aaron Balog

DATED: 12/30/97



**DECLARATION  
AND POWER OF ATTORNEY  
Original Application**

As a below named inventor, I declare that the information given herein is true, that I believe that I am the original, first and sole inventor if only one name is listed at 1 below, or a joint inventor if plural inventors are named below, of the invention entitled:

**SYNTHESIS OF EPOTHILONES INTERMEDIATES THERETO,  
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which is described and claimed in:

☐ the attached specification or                      ☒ the specification in application  
Serial No. 08/986,025, filed  
December 3, 1997  
(for declaration not accompanying appl.)

that I do not know and do not believe that the same was ever known or used in the United States of America before my or our invention thereof or patented or described in any printed publication in any country before my or our invention thereof, or more than one year prior to this application, or in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months prior to this application, that I acknowledge my duty to disclose information of which I am aware which is material to patentability in accordance with 37 CFR §1.56. I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I hereby claim the priority benefits under 35 U.S.C. §119 of any application(s) for patent or inventor's certificate listed below. All foreign applications for patent or inventor's certificate on this invention filed by me or my legal representatives or assigns prior to the application(s) of which priority is claimed are also identified below.

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U.S.	60/033,767	Jan. 14, 1997
U.S.	60/047,566	May 22, 1997
U.S.	60/047,941	May 29, 1997
U.S.	60/055,533	Aug.13, 1997

ALL FOREIGN APPLICATIONS, IF ANY, FILED PRIOR  
TO THE APPLICATION(S) OF WHICH PRIORITY IS CLAIMED

<u>COUNTRY</u>	<u>APPLICATION NO.</u>	<u>DATE OF FILING</u>
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all of the firm of DARBY & DARBY P.C., 805 Third Avenue, New York, NY 10022

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New York, NY 10022

DIRECT TELEPHONE CALLS TO:

A. David Joran, Esq.  
  
212-527-7761

FULL NAME AND RESIDENCE OF INVENTOR 1

LAST NAME: DANISHEFSKY      FIRST NAME: Samuel      MIDDLE NAME: J.

CITY: Englewood      STATE OR FOREIGN COUNTRY: New Jersey      COUNTRY OF CITIZENSHIP: U.S.A.

POST OFFICE ADDRESS: c/o Office of Industrial Affairs,  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue      CITY: New York      STATE OR COUNTRY: New York      ZIP CODE: 10021

FULL NAME AND RESIDENCE OF INVENTOR 2

LAST NAME: BERTINATO FIRST NAME: Peter MIDDLE NAME:  
CITY: Old Lyme STATE OR FOREIGN COUNTRY: Connecticut COUNTRY OF CITIZENSHIP: U.S.A.  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs, CITY: New York STATE OR COUNTRY: New York ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

FULL NAME AND RESIDENCE OF INVENTOR 3

LAST NAME: SU FIRST NAME: Dai-Shi MIDDLE NAME:  
CITY: New York STATE OR FOREIGN COUNTRY: New York COUNTRY OF CITIZENSHIP: China  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs, CITY: New York STATE OR COUNTRY: New York ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

FULL NAME AND RESIDENCE OF INVENTOR 4

LAST NAME: MENG FIRST NAME: Dang Fang MIDDLE NAME:  
CITY: New York STATE OR FOREIGN COUNTRY: New York COUNTRY OF CITIZENSHIP: China  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs, CITY: New York STATE OR COUNTRY: New York ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

FULL NAME AND RESIDENCE OF INVENTOR 5

LAST NAME: CHOU FIRST NAME: Ting-Chao MIDDLE NAME:  
CITY: Paramus STATE OR FOREIGN COUNTRY: New Jersey COUNTRY OF CITIZENSHIP: U.S.A.  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs, CITY: New York STATE OR COUNTRY: New York ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

FULL NAME AND RESIDENCE OF INVENTOR 6

LAST NAME: KAMENECKA FIRST NAME: Ted MIDDLE NAME:  
CITY: New York STATE OR FOREIGN COUNTRY: New York COUNTRY OF CITIZENSHIP: USA  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs, CITY: New York STATE OR COUNTRY: New York ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

FULL NAME AND RESIDENCE OF INVENTOR 7

LAST NAME: SORENSEN FIRST NAME: Erik MIDDLE NAME: J  
CITY: San Diego STATE OR FOREIGN COUNTRY: California COUNTRY OF CITIZENSHIP: U.S.A.  
POST OFFICE ADDRESS: c/o Office of Industrial Affairs, CITY: New York STATE OR COUNTRY: New York ZIP CODE: 10021  
Memorial Sloan-Kettering Cancer Center  
1275 York Avenue

Variable	Mean	SD	Min	Max
Age	34.2	5.1	21	48
Gender	Male	Female		
Marital Status	Married	Single		
Education	High School	College		
Occupation	Manager	Worker		
Income	\$10,000	\$20,000		
Health	Good	Poor		
Smoking	Yes	No		
Alcohol	Yes	No		
Exercise	Yes	No		
Stress	High	Low		
Sleep	Good	Poor		
Diet	Healthy	Unhealthy		
Family Size	2	3		
Home Ownership	Yes	No		
Car Ownership	Yes	No		
Travel Frequency	High	Low		
Work Hours	40	50		
Job Satisfaction	High	Low		
Life Satisfaction	High	Low		
Overall Health	Good	Poor		

MIDDLE NAME:

COUNTRY OF CITIZENSHIP: U.S.A.

STATE OR COUNTRY: New York ZIP CODE: 10021

Variable	Mean	SD	Min	Max
Age	34.2	5.1	21	48
Gender	Male	Female		
Marital Status	Married	Single		
Education	High School	College		
Occupation	Manager	Worker		
Income	\$10,000	\$20,000		
Health	Good	Poor		
Smoking	Yes	No		
Alcohol	Yes	No		
Exercise	Yes	No		
Stress	High	Low		
Sleep	Good	Poor		
Diet	Healthy	Unhealthy		
Family Size	2	3		
Home Ownership	Yes	No		
Car Ownership	Yes	No		
Travel Frequency	High	Low		
Work Hours	40	50		
Job Satisfaction	High	Low		
Life Satisfaction	High	Low		
Overall Health	Good	Poor		

MIDDLE NAME: A.

COUNTRY OF CITIZENSHIP: U.S.A.

STATE OR COUNTRY: New York      ZIP CODE: 10021

Variable	Mean	SD	Min	Max
Age	34.2	5.1	21	48
Gender	Male	Female		
Marital Status	Married	Single		
Education	High School	College		
Occupation	Manager	Worker		
Income	\$10,000	\$20,000		
Health	Good	Poor		
Smoking	Yes	No		
Alcohol	Yes	No		
Exercise	Yes	No		
Stress	High	Low		
Sleep	Good	Poor		
Diet	Healthy	Unhealthy		
Family Size	2	3		
Home Ownership	Yes	No		
Car Ownership	Yes	No		
Travel Frequency	High	Low		
Work Hours	40	50		
Job Satisfaction	High	Low		
Life Satisfaction	High	Low		
Overall Health	Good	Poor		

DATED: \_\_\_\_\_

DATED: \_\_\_\_\_

DATED: \_\_\_\_\_

DATED: \_\_\_\_\_

DATED: \_\_\_\_\_

DATED: \_\_\_\_\_

DATED: \_\_\_\_\_

DATED: \_\_\_\_\_

DATED: 2/18/98

Variable	Mean	SD	Min	Max
Age	34.2	5.1	21	48
Gender	0.45	0.50	0	1
Marital status	0.60	0.49	0	1
Education	12.5	1.2	9	16
Income	15.2	3.5	10	25
Occupation	1.2	0.8	0	2
Health status	0.75	0.42	0	1
Life satisfaction	4.2	1.5	1	7
Stress level	3.8	1.2	1	6
Work-life balance	4.5	1.8	1	7
Job satisfaction	4.1	1.4	1	7
Organizational commitment	4.3	1.6	1	7
Turnover intention	1.5	0.8	0	3
Employee engagement	4.4	1.7	1	7
Perceived organizational support	4.6	1.9	1	7
Workload	3.9	1.3	1	6
Time pressure	3.7	1.1	1	5
Role conflict	3.6	1.0	1	5
Role ambiguity	3.5	0.9	1	5
Supervisor support	4.7	2.0	1	7
Peer support	4.8	2.1	1	7
Organizational culture	4.9	2.2	1	7
Leadership style	5.0	2.3	1	7
Communication	5.1	2.4	1	7
Teamwork	5.2	2.5	1	7
Conflict resolution	5.3	2.6	1	7
Decision making	5.4	2.7	1	7
Problem solving	5.5	2.8	1	7
Resource management	5.6	2.9	1	7
Quality management	5.7	3.0	1	7
Customer service	5.8	3.1	1	7
Marketing strategy	5.9	3.2	1	7
Financial management	6.0	3.3	1	7
Human resource management	6.1	3.4	1	7
Information technology	6.2	3.5	1	7
Legal compliance	6.3	3.6	1	7
Environmental management	6.4	3.7	1	7
Social responsibility	6.5	3.8	1	7
Corporate governance	6.6	3.9	1	7
Board of directors	6.7	4.0	1	7
Shareholders	6.8	4.1	1	7
Employees	6.9	4.2	1	7
Customers	7.0	4.3	1	7
Suppliers	7.1	4.4	1	7
Competitors	7.2	4.5	1	7
Regulators	7.3	4.6	1	7
Media	7.4	4.7	1	7
Community	7.5	4.8	1	7
Society	7.6	4.9	1	7
Nature	7.7	5.0	1	7
Government	7.8	5.1	1	7
Industry	7.9	5.2	1	7
Market	8.0	5.3	1	7
Economy	8.1	5.4	1	7
Politics	8.2	5.5	1	7
Culture	8.3	5.6	1	7
Religion	8.4	5.7	1	7
Education	8.5	5.8	1	7
Health	8.6	5.9	1	7
Environment	8.7	6.0	1	7
Technology	8.8	6.1	1	7
Science	8.9	6.2	1	7
Art	9.0	6.3	1	7
Sports	9.1	6.4	1	7
Entertainment	9.2	6.5	1	7
Travel	9.3	6.6	1	7
Food	9.4	6.7	1	7
Drinks	9.5	6.8	1	7
Shopping	9.6	6.9	1	7
Transportation	9.7	7.0	1	7
Communication	9.8	7.1	1	7
Information	9.9	7.2	1	7
Security	10.0	7.3	1	7
Justice	10.1	7.4	1	7
Peace	10.2	7.5	1	7
War	10.3	7.6	1	7
Conflict	10.4	7.7	1	7
Cooperation	10.5	7.8	1	7
Competition	10.6	7.9	1	7
Collaboration	10.7	8.0	1	7
Partnership	10.8	8.1	1	7
Relationship	10.9	8.2	1	7
Network	11.0	8.3	1	7
Community	11.1	8.4	1	7
Society	11.2	8.5	1	7
Nation	11.3	8.6	1	7</

**ASSIGNMENT**

WHEREAS, I,

Kenneth A. Savin, residing at 504 East 81st Street, Apt. 4D, New York, New York 10028, a citizen of the United States of America,

hereinbelow called "Assignor," have made a certain invention in

**SYNTHESIS OF EPOTHILONES INTERMEDIATES THERETO,  
ANALOGUES AND USES THEREOF**

described in the specification in U.S. patent application Serial No. 08/986,025 filed in the U.S. Patent and Trademark Office on December 3, 1997; and

WHEREAS, SLOAN-KETTERING INSTITUTE FOR CANCER RESEARCH, a corporation organized and existing under and by virtue of the laws of the State of New York and having offices and doing business at 1275 York Avenue, New York, New York 10021 and elsewhere, hereinbelow called the "Assignee," is desirous of securing the entire right, title and interest in to the said invention, application and Letters Patent, when granted, and in and to any divisions, continuations, improvements, reissues or extensions that may be made or granted thereon;

NOW, THEREFORE, BE IT KNOWN, that for and in consideration of the sum of One Dollar (\$1.00) to us in hand paid by the said Assignee, and other good and valuable consideration, the receipt of all of which is hereby acknowledged, we, the said Assignor, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said Assignee, its successors and assigns, the entire right, title and interest throughout the world in and to the said invention, application and Letters Patent, when granted, and in and to any divisions, continuations, improvements, reissues or extensions that may be made or granted on any of them;

TO HAVE AND TO HOLD the same to the full end of the term or terms for which said Letters Patent may be granted, as fully and completely as the same might be held by us had this sale and assignment not been made.

For the consideration aforesaid, we hereby covenant and agree to and with the said Assignee, its successors and assigns, that whenever its counsel or representative, or the counsel or representative of its successors or assigns, shall advise that an amendment to, or a division of, or any other proceeding or action in connection with said application or invention, including interference proceedings, is lawful and desirable, or that a reissue or continuation or extension of said Letters


Patent is lawful and desirable, we will sign all papers and drawings, take all rightful oaths and affidavits, and do all acts necessary or required to be done for the procurement of valid Letters Patent for said invention, or for the reissue or continuation or extension of the same, and will do all acts necessary or required to secure to the said Assignee, its successors and assigns, the title to and full benefit of all rights hereby assigned, without charge to said Assignee or its successors or assigns, but at its or their expense;

AND the Commissioner of Patents and Trademarks is requested to issue the said Letters Patent, when granted, in accordance with this sale and assignment.

For the consideration aforesaid, we have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto the said Assignee, its successors and assigns, or the nominees of any of them, the entire right, title and interest in and to any and all Letters Patent for said invention which may be granted in countries foreign to the United States, and in and to any applications for Letters Patent which may be filed for said invention in countries foreign to the United States, and in and to the invention described in said applications; and we hereby authorize and empower said Assignee and its successors, assigns or nominees, to apply for Letters Patent or other form of protection on said invention in its own name or in the name of its successors, assigns or nominees, in any or all countries where it may desire to file such application, and where said application may be filed by another than the inventor; and we hereby covenant and agree to sign all papers and drawings, take all rightful oaths, execute all rightful affidavits, and do all acts necessary or required to be done for the procurement and maintenance of Letters Patent or other form of protection for said invention in countries foreign to the United States, and for further investing or confirming the right and title thereto in the Assignee, its successors, assigns or nominees, without charge to said Assignee, its successors, assigns or nominees, but at its or their expense.

We declare under penalty of perjury under the laws of the United States of America that we have signed this document as our own free act and that all of the foregoing is true and correct.

Dated. 3/18/98  
Witness: S. Langille, C. Nichols  
510 E. 82nd St. #A  
N.Y.C. 10028

  
SAVIN, Kenneth A.. Inventor

**ASSIGNMENT**

WHEREAS, we, DANISHEFSKY, Samuel J., residing at 22 Brayton Street, Englewood, New Jersey 07631, a citizen of the U.S.A.;

BERTINATO, Peter, residing at 1 Longacre Lane, Old Lyme, Connecticut 06371, a citizen of the U.S.A.;

SU, Dai-Shi, residing at 303 East 71st Street, Apt. 1G, New York, New York 10021, a citizen of China;

MENG, Dang Fang, residing at 312 East 66th Street, Apt. A, New York, New York 10021, a citizen of China;

CHOU, Ting-Chao, residing at 5 Daisy Way, Paramus, New Jersey 07652, a citizen of the U.S.A.;

KAMENECKA, Ted, residing at 310 East 66th Street, Apt. 4B, New York, New York, 10021, a citizen of the U.S.A.;

SORENSEN, Erik J., residing at 5275 Toscana Way #144, San Diego, California 92122, a citizen of the U.S.A., and

BALOG, Aaron, residing at 504 East 81st Street, Apt. 4M, New York, New York 10028, a citizen of the U.S.A.

hereinbelow called "Assignors" have made a certain invention in

**SYNTHESIS OF EPOTHILONES INTERMEDIATES THERETO,  
ANALOGUES AND USES THEREOF**

described in the specification in U.S. patent application Serial No. 08/986,025 filed in the U.S. Patent and Trademark Office on December 3, 1997; and

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TO HAVE AND TO HOLD the same to the full end of the term or terms for which said Letters Patent may be granted, as fully and completely as the same might be held by us had this sale and assignment not been made.

For the consideration aforesaid, we hereby covenant and agree to and with the said Assignee, its successors and assigns, that whenever its counsel or representative, or the counsel or representative of its successors or assigns, shall advise that an amendment to, or a division of, or any other proceeding or action in connection with said application or invention, including interference proceedings, is lawful and desirable, or that a reissue or continuation or extension of said Letters Patent is lawful and desirable, we will sign all papers and drawings, take all rightful oaths and affidavits, and do all acts necessary or required to be done for the procurement of valid Letters Patent for said invention, or for the reissue or continuation or extension of the same, and will do all acts necessary or required to secure to the said Assignee, its successors and assigns, the title to and full benefit of all rights hereby assigned, without charge to said Assignee or its successors or assigns, but at its or their expense;

AND the Commissioner of Patents and Trademarks is requested to issue the said Letters Patent, when granted, in accordance with this sale and assignment.

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nominees, without charge to said Assignee, its successors, assigns or nominees, but at its or their expense.

We declare under penalty of perjury under the laws of the United States of America that we have signed this document as our own free act and that all of the foregoing is true and correct.

Dated: 12/22/98  
Witness: Campbell Echols

Dan Shefsky  
DANISHEFSKY, Samuel J., Inventor

Dated: \_\_\_\_\_  
Witness: Campbell Echols

\_\_\_\_\_  
BERTINATO, Peter, Inventor

Dated: 12/22/97  
Witness: Campbell Echols

Dai-Shi Su  
SU, Dai-Shi, Inventor

Dated: 12/22/97  
Witness: Campbell Echols

Deng Fang Meng  
MENG, Deng Fang, Inventor

Dated: 1/8/98  
Witness: Campbell Echols

Ting-Chao Chou  
CHOU, Ting-Chao, Inventor

Dated: 12/22/97  
Witness: Campbell Echols

Ted Kamenecka  
KAMENECKA, Ted, Inventor

nominees, without charge to said Assignee, its successors, assigns or nominees, but at its or their expense.

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Dated: \_\_\_\_\_  
Witness: \_\_\_\_\_  
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DANISHEFSKY, Samuel J., Inventor

Dated: 1/2/98  
Witness: \_\_\_\_\_  
Stephen W. Wright  
\_\_\_\_\_

\_\_\_\_\_  
BERTINATO, Peter, Inventor

Dated: 12/22/97  
Witness: \_\_\_\_\_  
Campbell Echols  
\_\_\_\_\_

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SU, Dai-Shi, Inventor

Dated: 12/22/97  
Witness: \_\_\_\_\_  
Campbell Echols  
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MENG, Deng Fang, Inventor

Dated: \_\_\_\_\_  
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CHOU, Ting-Chao, Inventor

Dated: 12/22/97  
Witness: \_\_\_\_\_  
Campbell Echols  
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KAMENECKA, Ted, Inventor

Dated: \_\_\_\_\_

Witness: \_\_\_\_\_

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Dated: 12/30/97

Witness: \_\_\_\_\_

Campbell Echols

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SORENSEN, Erik J., Inventor

Aaron Balog  
BALOG, Aaron. Inventor

205090-47542860

Dated: 1/12/98

Witness: *Cecil J. Sorenson*

*Erik J. Sorenson*  
SORENSEN, Erik J., Inventor

Dated: 12/30/97

Witness: *Campbell Echols*

*Aaron Balog*  
BALOG, Aaron, Inventor

105090" 47542860

nominees, without charge to said Assignee, its successors, assigns or nominees, but at its or their expense.

We declare under penalty of perjury under the laws of the United States of America that we have signed this document as our own free act and that all of the foregoing is true and correct.


Dated: \_\_\_\_\_  
Witness: \_\_\_\_\_  
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DANISHEFSKY, Samuel J., Inventor

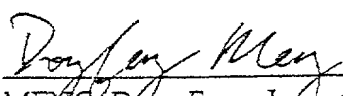
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BERTINATO, Peter, Inventor

Dated: 12/22/97  
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SU, Dai-Shi, Inventor

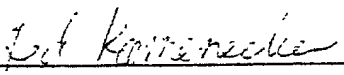
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MENG, Deng Fang, Inventor

Dated: \_\_\_\_\_  
Witness: \_\_\_\_\_  
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CHOU, Ting-Chao, Inventor

Dated: 12/22/97  
Witness: \_\_\_\_\_  
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\_\_\_\_\_  
KAMENECKA, Ted, Inventor



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UNITED STATES DEPARTMENT OF  
COMMERCE **DOCKETED**  
Patent and Trademark Office

Address: COMMISSIONER OF PATENT AND TRADEMARKS  
Washington, D C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
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08/986,025

12/03/1997

SAMUEL J.  
DANISHEFSKY

1078/1C598US

*2003080 -0037*

KAROLINE K. M. SHAIR  
CHOATE, HALL & STEWART  
EXCHANGE PLACE, 53 STATE STREET  
BOSTON, MA 02109

Date Mailed: 04/17/2000

### NOTICE REGARDING POWER OF ATTORNEY

This is in response to the Power of Attorney filed 03/27/2000.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

105090-47542860

*Rogers Hannon / Brenda Gay*

Customer Service Center  
Initial Patent Examination Division (703) 308-1202

ATTORNEY/APPLICANT COPY